

## CLAIMS

Claim 1 (original): A balanced blue spectrum therapy lighting fixture, the lighting fixture comprising:

a light source; and

a mixture of blue light and white light within the light source having a range between approximately 90% 420 – 490 nm blue light and approximately 10% white light to approximately 10% 420 – 490 nm blue light and approximately 90% white light.

Claim 2 (original): The lighting fixture of claim 1 wherein the blue light is 50% 420 – 490 nm blue light and 50 % white light.

Claim 3 (original): The lighting fixture of claim 1 and further comprising:

an array of fluorescent bulbs or L.E.D.'s, the bulbs and L.E.D.'s containing blue light and white light.

Claim 4 (original): The lighting fixture of claim 1 and further comprising:

a single bulb with one side emitting blue light and the other side emitting white light thereby emitting a balanced light.

Claim 5 (original): The lighting fixture of claim 5 wherein one half of the bulb is filled with the 420 - 490 nm blue phosphor and baked and the other side is filled with white phosphor and baked.

Claim 6 (original): The lighting fixture of claim 1 and further comprising:

a switching mechanism for adjusting blue and white scotopic/photopic light levels thereby affecting melatonin levels..

Claim 7 (original): The lighting fixture of claim 6 wherein in the switching mechanism is selected from the group consisting of electronic, mechanical, and radio frequency activation switching.

Claim 8 (original): The lighting fixture of claim 1 and further comprising:  
at least one color sleeve positioned over a light source for providing the blue light and white light levels.

Claim 9 (original): The lighting fixture of claim 8 wherein the color sleeves are adjustable.

Claim 10 (original): The lighting fixture of claim 1 wherein the blue light and white light levels are incorporated into fiber optics, one fiber for blue light and one fiber for white light.

Claim 11 (original): The lighting fixture of claim 1 wherein the blue light and white light levels are combined with an after-glow phosphor undercoat.

Claim 12 (original): The lighting fixture of claim 1 wherein the lighting source contains the following scotopic phosphor blend:

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<u>Approx. %</u>	<u>Phosphor Chemical Composition</u>	<u>Phosphor Peak (nm)</u>
40	SrO (P <sub>2</sub> O <sub>5</sub> B <sub>2</sub> O <sub>3</sub> ): Eu	478
22	Y <sub>2</sub> O <sub>3</sub> : Eu	611
20	La PO <sub>4</sub> : Co, Tb	544
18	Sr <sub>2</sub> P <sub>2</sub> O <sub>7</sub> : Eu	421
8	Ba Mg <sub>2</sub> Al <sub>16</sub> O <sub>27</sub> : Eu	450

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Claim 13 (original): The lighting fixture of claim 12 wherein the scotopic phosphor blend comprises phosphors to give light primarily in the 400 – 620 nm range.

Claims 14 – 26 (canceled)